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SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF PHYSIOLOGY-ANATOMY

BERKELEY, CALIFORNIA 94720

9 December 1981

Dr. Robert C. Hockett
Research Director
The Council for Tobacco
Research - U.S.A., Inc.
New York, NY 10022

Dear Dr. Hockett:

Early in January of 1981 the First Gordon Research Conference on "Oxygen Radicals in Biology and Medicine" was held in Ventura, California. Although there was only short notice for the planning and timing of this meeting, we were overwhelmed with requests for participation. The 120 persons who were admitted to the Conference agreed emphatically that another Conference was warranted because of the rapid growth of this important field with its broad implications for the health, well-being and survival of the human species as we approach the Twenty-First Century. A second Conference is now being organized and we intend to assemble at this time virtually all of the major national and international representatives of this field. As Chairman of the organizing committee, I am writing to you to ask if The Council for Tobacco Research - U.S.A., Inc. could make a contribution in the amount of \$3,000 to support the travelling and other expenses of those persons, mainly from abroad, whom we would like to invite to attend this meeting on 7-11 February, 1983 in the Santa Barbara area of California under the auspices of the Gordon Research Conferences. I append below some information pertaining to this meeting, including the rationale for holding it, the organizing committee, and the tentative composition of the program.

Rationale:

Biological damage processes mediated by reactive species of oxygen are being increasingly recognized by researchers as important factors in disease and aging. Clinicians are becoming more aware of the potential production of these species in humans and their potentially pathological consequences. Oxygen radical damage has, for example, been implicated in inflammation, arthritis, adult respiratory-distress syndrome, myocardial infarction, pulmonary dysfunction in hemodialized patients, Purtscher's syndrome, Bloom's syndrome, Systemic Lupus Erythematosus, mutagenicity and carcinogenicity, and others. While there has not yet been adequate experimental data to support the certain involvement of oxygen radicals in these conditions, the greatly increasing interest of many scientists in the problem more than warrants a conference designed to stimulate new research, heighten awareness of recent discoveries in basic research, and focus attention on their implications for human health.

Much of the recent progress in research concerning the role of oxygen radicals in disease has been due to the discovery and utilization of antioxidant

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radical, this oxygen radical, as well as other oxygen radical species and products derived therefrom, have received a great deal of attention. These other compounds include hydrogen peroxide, hydroxyl radical ($\text{OH}\cdot$) and singlet oxygen ($^1\text{O}_2$). The study of oxygen radical reactions in simple chemical and biochemical systems has defined parameters governing the initiation, propagation, and termination of destructive free radical chain reactions, and this understanding has suggested oxygen radical involvement in a remarkably diverse and extensive array of pathological states. Dramatic therapeutic effects of antioxidant substances, like vitamin E and selenium, in clinical settings have provided further support for the involvement of oxygen radicals in certain disease conditions. Recent research results of chemists, biologists, clinicians and epidemiologists have created a new multidisciplinary field considered by some to be the most exciting and impactful area of biological research. As with most research, progress is frequently accelerated by bringing together the leaders in the field with a selected audience to present the most recent research findings and discuss their implications. The Gordon Research Conferences permit detailed discussions of unpublished observations among chemists, biochemists, cell biologists and clinicians which can lead to rapid and effective delineation of critical problem areas in this field, and, hopefully, produce important new leads.

The quality of a meeting such as a Gordon Research Conference depends largely on the speakers and session chairman who have been selected for their ability to present new material and to stimulate discussion among the participants. We have already attracted significant numbers of leaders in the field to present their findings and discuss issues critical for an understanding of the role of oxygen and oxygen radicals both in normal and in pathological conditions. Clinical trials are ongoing at this moment and the organizers felt that a major emphasis of this conference should concern the basic chemistry and biochemistry of oxygen radicals and their effects in cellular systems. By understanding fundamental processes whereby oxygen radicals are generated in vivo, we will be in a much better position to understand how to regulate them and how to interfere with their pathological consequences.

The program sessions anticipated for this conference are listed below.
(A tentative outline of the scheduled sessions and speakers is appended).

1. Chemistry of Oxygen Radicals
2. Biological Oxidations
3. Biochemistry of Oxygen Radicals
4. Antioxidants
5. Prostaglandins/Inflammation
6. Cancer/Aging
7. Blood

Organizing Committee:

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William Pryor - Co-Chairman
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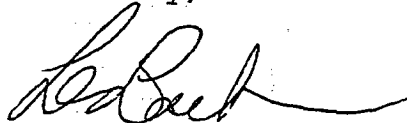
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Summary:

It is evident from the above that we are seeking to identify those topics for discussion which are at the frontier of this field, and that the leading persons will be recruited for participation. The extent to which we will be successful in bringing them all together will depend upon our ability to raise the necessary funds. I trust that you will be able to make available to us a contribution that will insure the success of this forthcoming meeting. If this falls within the purview of the areas which The Council for Tobacco Research - U.S.A., Inc. supports, we hope you can send a check to myself in care of the Gordon Research Conference, or have the check made out to Gordon Research Conferences "Role of Oxygen Radicals in Biology and Medicine." Checks can be sent either to me at the above address, or to Dr. Alexander Cruikshank, Chairman, Gordon Research Conferences, Pastore Chemical Laboratory, University of Rhode Island, Kingston, Rhode Island 02881. In the latter case, please send a copy of your correspondence to me.

Thanking you in advance.

Yours sincerely,



Lester Packer, Ph.D.
Professor
Chairman, Gordon Research Conference

LP: jh
encl.: tentative schedule and speakers for meeting